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**EMPOWERMENT, RESPECT, PHYSICAL WORK ENVIRONMENT, AND
SAFETY PERFORMANCE: THE MEDIATION ROLE OF PERCEIVED
MANAGEMENT COMMITMENT TO SAFETY**

By

MOHAMMAD ADEL GHANDOUR AL- BSHEISH



UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
2018**

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**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**

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ABSTRACT

Safety performance has become a vital issue for healthcare organizations, particularly in Intensive Care Units (ICUs) to ensure enhanced health and safety outcomes, not just for the patients, but also for the staff nurses, as they are considered as an integral part to achieve high quality of care. However, a dearth of research was noted in this domain. As a consequence, to maximize empirical data on antecedent factors to safety performance, this study intends to investigate the relationships between psychological empowerment, respect to the employees' rights and needs, physical work environment, and safety performance among ICU nurses. The study also intends to determine whether the perceived management commitment to safety has a mediating role in these relationships. This study adopted the social cognitive theory and organizational support theory as the underpinning theories to develop its research model. Cross-sectional study by using survey was conducted, and 551 questionnaires were distributed to the ICU nurses in the Hashemite Kingdom of Jordan with a response rate of 52%. This study used the Partial Least Squares-Structural Equation Modelling (PLS-SEM) to establish the validity and reliability of the measurement model and to test the study hypotheses. The results supported the theoretical model; they revealed that psychological empowerment and perceived respect had significant relationships with safety performance, while the nurses' satisfaction with their physical work environment had a significant effect on safety performance through perceived management commitment to safety. In addition, the mediating effect of perceived management commitment to safety was also empirically justified. A model for improving the safety performance was proposed. The practical implications indicated that safety management commitment plays a significant importance in safety outcomes. For future research, further mediators are recommended. Finally, the study is useful and important to policy makers, academicians and practitioners to further improve and develop safety performance at healthcare organizations.

Keywords: safety performance, psychological empowerment, respect employees' needs and rights, physical work environment, perceived management commitment to safety

ABSTRAK

Prestasi keselamatan menjadi isu penting bagi organisasi penjagaan kesihatan, terutamanya dalam Unit Rawatan Rapi (ICU). Ini bagi memastikan hasil kesihatan dan keselamatan ditingkatkan, bukan hanya untuk pesakit, tetapi juga untuk jururawat. Ini kerana mereka dianggap sebagai elemen penting dalam usaha untuk mencapai penjagaan kesihatan yang berkualiti tinggi. Walau bagaimanapun, penyelidikan dalam bidang ini amat kurang. Oleh itu, untuk memaksimumkan data empirikal mengenai faktor-faktor yang berkaitan dengan prestasi keselamatan, kajian ini dijalankan dengan tujuan untuk menyelidik hubungan antara pemerksaan psikologi, hak pekerja dan menghormati keperluan mereka, persekitaran kerja fizikal, dan prestasi keselamatan dalam kalangan jururawat di ICU. Kajian ini juga bertujuan untuk menentukan sama ada komitmen pengurusan yang dilihat terhadap keselamatan mempunyai perantaraan dalam hubungan ini. Kajian ini menggunakan teori kognitif sosial dan teori sokongan organisasi sebagai teori asas untuk membangunkan model penyelidikan. Kajian keratan rentas dengan menggunakan tinjauan telah dijalankan. Sebanyak 551 soal selidik diedarkan kepada jururawat ICU di Kerajaan Hashemite, Jordan dengan kadar maklum balas sebanyak 52 peratus. Kajian ini menggunakan Model Persamaan Berstruktur – Kuasa Dua Terkecil Separa atau Partial Least Squares-Structural Equation Modelling (PLS-SEM) untuk menentukan kesahan dan kebolehpercayaan model pengukuran dan untuk menguji hipotesis kajian. Hasil dapatan menyokong model teori yang mendedahkan bahawa pemerksaan psikologi dan rasa hormat mempunyai hubungan yang signifikan dengan prestasi keselamatan. Sementara itu, kepuasan jururawat terhadap persekitaran kerja fizikal mereka mempunyai kesan yang signifikan terhadap prestasi keselamatan melalui komitmen pengurusan yang dianggap selamat. Di samping itu, kesan perantaraan tanggapan komitmen pengurusan kepada keselamatan juga wajar dibuat secara empirik. Model untuk meningkatkan prestasi keselamatan turut dicadangkan. Implikasi praktikal menunjukkan bahawa komitmen pengurusan keselamatan memainkan peranan penting bagi hasil keselamatan. Bagi penyelidikan pada masa hadapan, disyorkan agar faktor pengantara yang lain turut dikaji. Akhir sekali, kajian ini berguna dan penting kepada pembuat dasar, ahli akademik dan pengamal untuk terus meningkatkan serta membangunkan prestasi keselamatan di organisasi penjagaan kesihatan.

Kata

Kata kunci: prestasi keselamatan, pemerksaan psikologi, hormati keperluan dan hak pekerja, persekitaran kerja fizikal, tanggapan komitmen pengurusan kepada keselamatan

ACKNOWLEDGEMENT

In the Name of Allah, Most Gracious, Most Merciful, the Lord of the worlds who gave me strength and courage to complete this work. May His peace and pleasant blessings be upon our beloved prophet Muhammad (PBUH), his Household and Companions. I want to thank many people who contributed to the success of this study. Without their support and encouragement, this study may not have been completed.

First, I would like to express my heartfelt thanks to my main supervisor Dr. Munauwar bin Mustafa. He is the one who interjected entrepreneurial intellects into my thesis. His support, encouragement, and guidance during the process of this thesis are significant for its achievement. A few words cannot express how much I have learned from him and his advice that enormously contributed to my academic and profession development. So, many thanks for him.

Next, I would like to express my deep appreciation to my second supervisor Dr. Mohd Azril Ismail. He has helped me stay focused on how much I had accomplished at each stage and what I could do to reach the next one. His support means more to me than I could ever express in words. Thanks for him.

I would also like to express my deep appreciation to my reviewers, Prof. Dr. Tengku Mohammad Ariff and Associate Prof. Dr. Chandrakantan Subramaniam. Thank you for presenting feedback that continuously enhanced my work and encouraged me to move forward with enthusiasm.

I would also wish to acknowledge my great indebtedness to many other professors and students at University Utara Malaysia who made my time memorable and rewarding during living in Malaysia. I would not be here today without you. Thank you.

I would like also to thank all nurses who participated in this study, and the management of the JMoH for their support. Thank you.

Finally, I would like to express my sincere appreciation for my father, mother, brothers and sisters, for their love, sacrifices, and instilling strong values of education, positive ambition, and commitment.

Most importantly, I thank my wife, Rania, and my kids, Allieth, Hashem, and Zain, for their unconditional love, support, patience, and the time sacrificed that we would have otherwise been sharing together. You were my inspiration to finish and we did so together.

MOHAMMAD AL- BSHEISH

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LIST OF ABBREVIATIONS

α	Alpha coefficient representing a measure of internal reliability
ANA	American Nurses Association
BICU	Burn Intensive Care Units
CCUs	Coronary Care Units
CDC	Centers for Disease Control and Prevention
dB	Decibel
ICUs	Intensive Care Units
IOM	Institute of Medicine
JMoH	Jordanian Ministry of Health
JUH	Jordanian University Hospital
KAH	King Abdullah Hospital
MoH	Ministry of Health
NICUs	Neonatal Intensive Care Units
NSIs	Needle Stick Injuries
OHS	Occupational Health and Safety
p	The value of p (or probability level)
PICUs	Pediatric Intensive Care Units
PLS-SEM	Partial Least Squares-Structural Equation Modelling
PMCS	Perceived Management Commitment to Safety
PN	Practical Nurse
PPE	Personal Protective Equipment
RMS	Royal Medical Services
RN	Registered Nurse
SICUs	Surgical Intensive Care Units
SPSS	Statistical Package for the Social Sciences
WHO	World Health Organization
β	Beta (standardized regression coefficient)

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Since the industrial revolution and scientific management era in the 18th century, workplace has been confronting many challenges regarding occupational accidents. Accordingly, Visser, Pijl, Stolk, Neeleman and Rosmalen (2007) identified occupational accidents as unexpected and unplanned, and can result in one or more workers incurring personal injuries, disease, or death. Occupational Health and Safety (OHS) also defined occupational accidents as an occurrence arising from the course of work, which results in non-fatal or fatal injuries (Papazoglou, Aneziris, Konstandinidou & Giakoumatos, 2009).

Occupational accidents are global phenomena; they vary from one country to another and from one industry to another. In general, massive distress of these occupational accidents on employees and their relatives on the one hand and employers' interest on the other hand are substantial (Neal & Griffin, 2002). Occupational accidents' consequences costs include the direct costs of injuries treatment and disbursement of compensations as well as indirect costs such as loss of equipment, facilities, materials, held up production, and employees' turnover. The indirect costs of accidents are higher than the direct costs (Polinder et al., 2016).

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APPENDICES

APPENDIX I: ENGLISH QUESTIONNAIRE



Date: / / 2017

Dear respondent:

I am a postgraduate student of Universiti Utara Malaysia and conducting a survey regarding safety performance, to fulfill the PhD requirement of the university. The objective of this study is to help me understand the relationship between psychological empowerment, respect employee needs/rights, physical work environment, management commitment to safety, and safety performance.

I realize that your time is valuable and many demands are made upon it by your heavy workload. However, your participation in this survey, which will require only about 10- 15 minutes of your time, is vital to the success of this study.

Please, be rest assured that all your responses will be kept strictly confidential and I will keep your identity anonymous. All the data will be aggregated and will be strictly used for academic purposes only.

I am looking forward to completing my questionnaire best to your convenience and later I can revisit you to collect it back.

If you are interested in this study, please contact me through email at gandour1984@yahoo.com or call me at 00962786416265

Thank you in advance for your cooperation.

Yours sincerely,

Mohammad A. Al-Bsheish, PhD Candidate in Healthcare Management

College of Business,

Universiti Utara Malaysia

06010 Sintok - Kedah - Malaysia

SECTION A: DEMOGRAPHIC INFORMATION

Please fill in blanks and tick (✓) questions below in the appropriate boxes that correspond to the questions?

1. Age: • Less than 24 Y • 25 – 34 Y • 35 – 44 Y • Over 45Y

2. Gender : • Male • Female

3. Marital Status: • Married • Single • Divorced / Widowed.

4. Level of Education:

• Diploma • Bachelor's degree • Master's degree • PhD

5. Job Tenure:

• Less than 2 Y • 2 – 8 Y • 9 – 15 Y • above 15 Y

6. Number of years in intensive care unit:

• Less than 2 Y • 2 – 8 Y • 9 – 15 Y • above 15 Y

7. Were you exposed to needle stick injuries at work during the last 12 months?
• No • Yes

8. Were you exposed to back pain at work during last the 12 months?
• No • Yes

9. Were you exposed to hospital-acquired infection at work during the last 12 last months?
• No • Yes

10. Were you received safety training at work during the last 12 last months?
• No • Yes

SECTION B: PSYCHOLOGICAL EMPOWERMENT

Following are questions pertaining to psychological empowerment. Considering only the intensive care unit where you work, please tick (✓) on the appropriate number on the 5-Likert scale which consists of 1 (Strongly Disagree) 2 (Disagree) 3 (Neither Agree Nor Disagree) 4 (Agree) 5 (Strongly Agree) that best describes your response. Please keep your response general to your unit as a whole.

#	Items	1	2	3	4	5
1.	The work I do is very important to me					
2.	My job activities are personally meaningful to me					
3.	The work I do is meaningful to me					
4.	I am confident about my ability to do my job					
5.	I am self-assured about my capabilities to perform my work activities.					
6.	I have mastered the skills necessary for my job					
7.	I have significant autonomy in determining how I do my job.					
8.	I can decide on my own how to go about doing my work.					
9.	I have considerable opportunity for independence and freedom in how I do my job.					
10.	My impact on what happens in my department is large.					
11.	I have a great deal of control over what happens in my department.					
12.	I have significant influence over what happens in my department.					

SECTION C: RESPECT EMPLOYEES' SAFETY NEEDS/RIGHTS

Following are questions pertaining to respect employee's needs/rights. Considering only the intensive care unit where you work, please tick (✓) on the appropriate number on the 5-Likert scale which consists of 1 (Strongly Disagree) 2 (Disagree) 3 (Neither Agree nor Disagree) 4 (Agree) 5 (Strongly Agree) that best describes your response. Please keep your response general to your unit as a whole.

#	Items	1	2	3	4	5
1.	My managers respect the safety work I do					
2.	My managers respect my safety work-related ideas					
3.	My managers think highly of the quality of my work in safety manner					
4.	My managers appreciate my unique safety contributions on the job					
5.	My managers think that I have valuable safety insights and ideas					
6.	My managers think it would be difficult to replace me					

SECTION D: PHYSICAL WORK ENVIRONMENT

Following are questions pertaining to **satisfaction of your physical work environment**. Considering only the intensive care unit where you work, please tick (√) on the appropriate number on the 5-Likert scale, which consists of 1 (Strongly dissatisfied), 2 (Dissatisfied) 3 (Neither dissatisfied nor satisfied) 4 (Satisfied) 5 (Strongly satisfied) that best describes your response. Please keep your response general to your unit as a whole.

#	Items	1	2	3	4	5
1.	Noise environment					
2.	Possibility of concentrating in my workplace					
3.	The quality of the lighting					
4.	The physical position of my work station					
5.	Possibility of having private conversations					
6.	Possibility of managing noise					
7.	The furniture in my work area					
8.	Possibility of seeing outside					
9.	The cleanliness of my work area					
10.	The equipment available in my work area					
11.	The air circulation in my work area					
12.	The surfaces I usually walk on.					

SECTION E: PERCEIVED MANAGEMENT COMMITMENT TO SAFETY

Following are questions pertaining to **perceived management commitment to safety**. Considering only the intensive care unit where you work, please tick (√) on the appropriate number on the 5-Likert scale which consists of 1 (Strongly Disagree) 2 (Disagree) 3 (Neither Agree Nor Disagree) 4 (Agree) 5 (Strongly Agree) that best describes your response. Please keep your response general to your unit as a whole.

#	Items	1	2	3	4	5
1.	Safety is given high priority by my hospital management.					
2.	Safety rules and procedures are strictly followed by my hospital management.					
3.	Corrective action is always taken when my hospital management is told about unsafe practices.					
4.	In my workplace, managers do not show interest in the safety of nurses.					
5.	My hospital management considers safety to be equally important as patients' care.					
6.	Members of my hospital management do not attend safety meetings.					
7.	I feel that my hospital management is willing to compromise on safety for increasing patients' care.					
8.	When near-miss accidents are reported, my hospital management acts quickly to solve the problems.					
9.	My hospital provides sufficient personal protective equipment for the nurses.					

SECTION F: SAFETY PERFORMANCE

Following are questions pertaining to **safety performance**. Considering only the intensive care unit where you work, please tick (✓) on the appropriate number on the 5-Likert scale which consists of 1 (Strongly Disagree) 2 (Disagree) 3 (Neither Agree Nor Disagree) 4 (Agree) 5 (Strongly Agree) that best describes your response. Please keep your response general to your unit as a whole.

#	Items	1	2	3	4	5
1.	I do not follow safety rules that I think are unnecessary.					
2.	I handle all situations as if there is a possibility of having an accident.					
3.	I wear safety equipment required by practice.					
4.	I keep my work area clean.					
5.	I encourage co-workers to be safe.					
6.	I keep my work equipment in safe working condition.					
7.	I report safety problems to my supervisor when I see safety problems.					
8.	I correct safety problems to ensure accidents will not occur.					
9.	I take shortcuts to safe working behaviors in order to get the job done faster.					
10.	I overlook safety procedures in order to get my task done more quickly.					
11.	I follow all safety procedures regardless of the situation I am in.					
12.	I encourage my co-worker to work safely					
13.	I voluntarily carry out tasks or activities that help to improve my unit safety					
14.	I put extra effort to improve the safety in my unit					
15.	I always point out to the management if any safety related matters are noticed in my unit					
16.	I help my co-workers when they are working under risky or hazardous conditions.					

End of the Questionnaire
Thanks Your Cooperation

APPENDIX II: ARABIC QUESTIONNAIRE

إستبانة رأي الممرضين عن أداء السلامة في المستشفيات الاردنية



عزيزي الممرض

أنا طالب دراسات عليا من جامعة اوتارا الماليزية أرغب بإجراء استطلاع رأي للممرضين عن أداء السلامة وذلك لتلبية متطلبات الحصول على درجة الدكتوراة في إدارة الخدمات الصحية. الهدف من هذه الدراسة هو فهم العلاقة بين التمكين النفسي، احترام حقوق وحاجات الممرض، خطورة بيئة العمل، التزام الإدارة بمعايير السلامة وأداء السلامة. إنني أدرك قمية وقتكم وأعباء العمل الخاص بكم، ولكن مشاركتكم في هذا الإستطلاع هو إثراء حقيقي لهذا البحث ولايتطلب أكثر من 10-15 دقيقة من وقتكم الثمين. أرجو أن تظمنن الى أن إجاباتكم سيتم الإحتفاظ بها بشكل سري جداً وسوف تبقى هويتك مجهولة، علما بأن البيانات المجموعة ستستخدم لأغراض البحث العلمي فقط. إذا كنت مهتما في هذه الدراسة أو نتائجها في المستقبل الرجاء التواصل مع الباحث عن طريق البريد الإلكتروني gandour1984@yahoo.com أو الإتصال بي على الهاتف 00962784616265

مع خالص التقدير و الإحترام لجليل تعاونكم

زميلكم/ محمد عادل غندور البشيش

طالب دكتوراة

كلية ادارة الأعمال – جامعة اوتارا الماليزية

القسم الأول: المعلومات الديموغرافية				
الرجاء وضع علامة (√) في المربع المناسب في ما يخص الأسئلة التالية:				
1.	العمر	<input type="checkbox"/> أقل من 24 سنة	<input type="checkbox"/> 24-34	<input type="checkbox"/> 35-44 <input type="checkbox"/> أكثر من 45 سنة
2.	الجنس	<input type="checkbox"/> ذكر	<input type="checkbox"/> أنثى	
3.	الحالة الاجتماعية	<input type="checkbox"/> متزوج	<input type="checkbox"/> أعزب	<input type="checkbox"/> أرمل/مطلق
4.	مستوى التعليم	<input type="checkbox"/> دبلوم	<input type="checkbox"/> بكالوريوس	<input type="checkbox"/> ماجستير <input type="checkbox"/> دكتوراة
5.	سنوات الخبرة في قسم العناية المركزة	<input type="checkbox"/> أقل من 2	<input type="checkbox"/> 3-8	<input type="checkbox"/> 9-14 <input type="checkbox"/> أكثر من 15
6.	سنوات الخبرة في قسم العناية المركزة	<input type="checkbox"/> أقل من 2	<input type="checkbox"/> 3-8	<input type="checkbox"/> 9-14 <input type="checkbox"/> أكثر من 15
7.	هل تعرضت لوحزة ابرة في عمك خلال الإثنا عشر شهراً الماضية	<input type="checkbox"/> لا	<input type="checkbox"/> نعم	
8.	هل تعرضت لإصابة في منطقة الظهر في عمك خلال الإثنا عشر شهراً الماضية	<input type="checkbox"/> لا	<input type="checkbox"/> نعم	
9.	هل تعرضت لعدوى مكتسبة في عمك خلال الإثنا عشر شهراً الماضية	<input type="checkbox"/> لا	<input type="checkbox"/> نعم	
10.	هل شاركت بتدريب لغايات السلامة ومكافحة العدوى اثناء فترة عمك	<input type="checkbox"/> لا	<input type="checkbox"/> نعم	

فيما يلي الأسئلة المتعلقة بالتمكن النفسي , يرجى وضع إشارة (√) على الرقم المناسب في مقياس ليكرت الخماسي والذي يعبر عن (1) لا اتفق تماماً (2) لا اتفق (3) محايد (4) اتفق (5) اتفق تماماً. هذه الخيارات تصف إجابتك عن الأسئلة الخاصة بالقسم الذي تعمل فيه.

رقم	الفقرات	1	2	3	4	5
		لا اتفق تماماً	لا اتفق	محايد	اتفق	اتفق تماماً
1.	العمل الذي أقوم به مهم جداً بالنسبة لي.					
2.	مهمّاتي الوظيفية لها معنى خاص بالنسبة لي.					
3.	العمل الذي أقوم به له قيمة بالنسبة لي.					
4.	أنا واثق بقدراتي على القيام بعملتي.					
5.	أنا متأكد من إمكاناتي لأداء أنشطة عملي.					
6.	أنا أتقن المهارات الضرورية لأداء عملي.					
7.	أنا أملك استقلالية عالية في كيفية تنفيذ عملي.					
8.	أنا أستطيع أن أقرر بنفسني ما يحتاجه عملي .					
9.	لدي فرصة كبيرة في أن أكون مستقلاً وحرراً في كيفية القيام بعملتي.					
10.	لديّ تصوّر كبير بما يحدث في القسم الذي أعمل فيه.					
11.	لدي قدراً كبيراً من السيطرة على ما يحدث في القسم الذي أعمل فيه.					
12.	لديّ تأثير كبير على ما يحدث في القسم الذي أعمل فيه.					

القسم الثالث: احترام احتياجات الممرض و حقوقه المتعلقة بالسلامة

فيما يلي الأسئلة المتعلقة باحترام احتياجات الممرض و حقوقه، يرجى وضع إشارة (√) على الرقم المناسب في مقياس ليكرت الخماسي والذي يعبر عن (1) لا اتفق تماماً (2) لا اتفق (3) محايد (4) اتفق (5) اتفق تماماً. هذه الخيارات تصف إجابتك عن الأسئلة الخاصة بالقسم الذي تعمل فيه

رقم	الفقرات	1	2	3	4	5
		لا اتفق تماماً	لا اتفق	محايد	اتفق	اتفق تماماً
1.	مديري يحترم عمل السلامة الذي أقوم به					
2.	مديري يحترم الأفكار المتعلقة بالسلامة					
3.	انجاز العمل بطريقة امنه هي محط إهتمام وتقدير من مديري					
4.	مديري يقدر ان لي مساهمات فريدة في مجال السلامة في العمل					
5.	مديري يعتقد أن لي أفكار و رؤى قيمة في مجال السلامة					
6.	مديري يصعب عليه التخلي عني أو أستبدالي					

القسم الرابع: بيئة العمل

فيما يلي الأسئلة المتعلقة برضاك عن بيئة العمل، يرجى وضع إشارة (✓) على الرقم المناسب في مقياس ليكرت الخماسي والذي يعبر عن (1) غير راضي تماماً (2) غير راضي (3) محايد (4) راضي (5) راضي تماماً. هذه الخيارات تصف إجابتك عن الأسئلة الخاصة بالقسم الذي تعمل فيه.

رقم	الفقرات	1	2	3	4	5
		غير راضي تماماً	غير راضي	محايد	راضي	راضي تماماً
1.	مستوى الضوضاء في القسم الذي أعمل فيه					
2.	إمكانية التركيز في مكان عملي					
3.	نوعية وجودة الإضاءة					
4.	تصميم المكان الذي أعمل فيه					
5.	إمكانية إجراء محادثات خاصة بالعمل بعيداً عن المرضى					
6.	التحكم والتعامل مع مستوى الضوضاء في القسم					
7.	الأثاث المتوفر في القسم الذي أعمل فيه					
8.	إمكانية التواصل مع البيئة الخارجية للقسم					
9.	مستوى النظافة في القسم الذي أعمل فيه					
10.	المعدات المتوفرة في القسم الذي أعمل فيه					
11.	مستوى التهوية في القسم الذي أعمل فيه					
12.	جودة أرضية القسم الذي أعمل فيه					

القسم الخامس: التزام الإدارة بمعايير السلامة

فيما يلي الأسئلة المتعلقة بالالتزام الإدارة لمعايير السلامة، يرجى وضع إشارة (✓) على الرقم المناسب في مقياس ليكرت الخماسي والذي يعبر عن (1) لا اتفق تماماً (2) لا اتفق (3) محايد (4) اتفق (5) اتفق تماماً. هذه الخيارات تصف إجابتك عن الأسئلة الخاصة بالقسم الذي تعمل فيه.

رقم	الفئة	1	2	3	4	5
		لا اتفق	لا اتفق	محايد	اتفق	اتفق تماماً
1.	تُعطى إجراءات سلامة الممرضين أولوية عالية من قبل إدارة المستشفى.					
2.	قواعد وإجراءات السلامة يتم اتباعها بدقة من قبل إدارة المستشفى.					
3.	الإجراءات التصحيحية دائماً تُؤخذ عندما يتم إخبار الإدارة عن الممارسات غير الآمنة.					
4.	المدير أو المشرف عن العمل لا يظهر اهتماماً بسلامة الممرضين..					
5.	تعتبر الإدارة أهمية سلامة الكوادر الطبية مساوية لأهمية الخدمة المقدمة للمرضى.					
6.	أعضاء الإدارة لا يتقيدون بحضور اجتماعات السلامة.					
7.	أشعر بأن الإدارة مستعدة لتقديم تنازلات بشأن سلامة الكوادر في سبيل زيادة الخدمة المقدمة للمرضى.					
8.	عندما يتم الإبلاغ عن حوادث تتصرف الإدارة بسرعة من أجل حل المشاكل.					
9.	قسمي يوفر ما يكفي من معدات الحماية الشخصية للممرضين.					

القسم السادس: أداء السلامة

فيما يلي الأسئلة المتعلقة بأداء السلامة، يرجى وضع إشارة (✓) على الرقم المناسب في مقياس ليكرت الخماسي والذي يعبر عن (1) لا اتفق تماماً (2) لا اتفق (3) محايد (4) اتفق (5) اتفق تماماً. هذه الخيارات تصف إجابتك عن الأسئلة الخاصة بالقسم الذي تعمل فيه.

رقم	الفقرات	1	2	3	4	5
		لا اتفق	لا اتفق	محايد	اتفق	اتفق تماماً
1.	لا أتبع قواعد السلامة التي أعتقد أنها غير ضرورية.					
2.	أتعامل مع جميع المواقف كما لو كان هناك احتمال وجود حادث.					
3.	أرتدي معدات السلامة التي يتطلبها العمل.					
4.	أحافظ على نظافة منطقة العمل التي أعمل بها.					
5.	أقوم باتباع قواعد السلامة لكي أحافظ على سلامة زملائي.					
6.	أحافظ على معدات عملي لتبقى صالحة للإستخدام.					
7.	أبلغ مديري عن المشاكل المتعلقة بالسلامة في قسمي.					
8.	أصحح المشاكل المتعلقة بالسلامة لضمان عدم وقوع حوادث.					
9.	أتبع طرقاً مختصرة من أجل إنجاز عملي بشكل آمن وسريع.					
10.	أشرف على إجراءات السلامة لكي أنجز مهمتي بسرعة.					
11.	ألتزم بجميع إجراءات السلامة بغض النظر عن الحالة التي أنا بها.					
12.	أشجع زملائي في العمل على اتباع قواعد السلامة .					
13.	أقوم بأعمال ومهام تطوعية تساعد على تحسين السلامة في مكان العمل.					
14.	أبذل جهداً إضافياً لتحسين السلامة في مكان عملي.					
15.	أبلغ الإدارة دائماً عن المشاكل المتعلقة بالسلامة في قسمي.					
16.	أساعد زملائي في العمل عندما يعملون في ظروف خطيرة.					

نهاية الاستبيان
شكراً لحسن تعاونكم

APPENDIX III: DATA COLLECTION LETTER



OTHMAN YEOP ABDULLAH
GRADUATE SCHOOL OF BUSINESS
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel.: 604-928 7101/7113/7130
Faks (Fax): 604-928 7160
Laman Web (Web): www.oagbsb.uum.edu.my

"MUAFAKAT KEDAH"

UUM/OYAGSB/R-4/4/1
6 December 2016

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF RECOMMENDATION FOR DATA COLLECTION AND RESEARCH WORK

This is to certify that **MOHAMMAD ADEL GHANDOUR AL-BSHEISH (Matric No: 901123)** is a student of Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia pursuing his Doctor of Philosophy (PhD). He is conducting a research entitled **"The Influence Of Employees Empowerment, Respect, Hazardous Environment Of Safety Performance Among Nurses At Jordanian Hospitals & Mediation Role Of Management Commitment To Safety"** under the supervision of Dr. Munauwar B Mustafa.

In this regard, we hope that you could kindly provide assistance and cooperation for him to successfully complete the research. All the information gathered will be strictly used for academic purposes only.

Your cooperation and assistance is very much appreciated.

Thank you.

"BERKHIDMAT UNTUK NEGARA"
"ILMU, BUDI, BAKTI"

Yours faithfully

ROZITA BINTI RAMLI
Assistant Registrar
for Dean

Othman Yeop Abdullah Graduate School of Business

c.c - Supervisor
- Student's File (901123)

Universiti Pengurusan Terkemuka
The Eminent Management University



APPENDIX IV: JMOH APPROVAL LETTER



الرقم CODE : MOH REC 170127

التاريخ

الموافق

قرار لجنة اخلاقيات البحث العلمي

اجتمعت لجنة اخلاقيات البحث العلمي بتاريخ 28 / 9 / 2017 لمناقشة ودراسة
البحث العلمي المقدم من قبل طالب الدكتوراه/ محمد عادل غندور البشيش.
بعنوان :

*** The Influence of Jordanian ICUs Nurses Empowerment, Respect
and Physical Work Environment on Safety
Performance, Meditation Role of Perceived Management
Commitment to Safety***

وقد قررت اللجنة بالاجماع الموافقة على اجراء البحث المشار اليه اعلاه .

وعليه تم التوقيع من قبل اعضاء اللجنة حسب الاصول .

عضو اللجنة
رئيس قسم الاشعة العلاجية
الدكتور / رسمي مبيضين

عضو اللجنة
رئيس قسم الجراحة العامة
الدكتور / فايز الحمود

عضو اللجنة
المساعد لشؤون التمريض
الدكتور / هاني القضاة

عضو اللجنة
رئيس قسم التوليد والتوليد
الدكتور / عبد الحنان السليمات

عضو اللجنة
رئيس قسم الباطني/المكلف
الدكتور / عباس منصور
الدكتور عباس منصور
استشاري اول الامراض الباطنية
Dr. ABBAS H. MANSOUR
Senior Consultant

عضو اللجنة
رئيس قسم الاطفال
الدكتور / باسمه مرار

رئيس اللجنة /
مدير مستشفى البشير/ المكلف

الدكتور / عمار نعيم الشرفا

المملكة الأردنية الهاشمية

هاتف: ٥٢٠٠٢٣٠ + ٩٦٢ ٦ فاكس: ٥٦٨٨٢٧٢ + ٩٦٢ ٦ ص.ب. ٨٦ عمان ١١١١٨ الأردن. الموقع الإلكتروني: www.moh.gov.jo

APPENDIX V: MISSING VALUES REPLACEMENT

#	Result Variable	N of Replaced Missing Values	Case Number of Non-Missing Values		N of Valid Cases	Creating Function
			First	Last		
1.	Gender_1	1	1	289	289	SMEAN(Gender)
2.	Tenure_1	1	1	289	289	SMEAN(Tenure)
3.	PE2_1	1	1	289	289	SMEAN(PE2)
4.	PE4_1	2	1	289	289	SMEAN(PE4)
5.	PE5_1	1	1	289	289	SMEAN(PE5)
6.	PE8_1	1	1	289	289	SMEAN(PE8)
7.	REN2_1	2	1	289	289	SMEAN(REN2)
8.	REN4_1	1	1	289	289	SMEAN(REN4)
9.	PWE3_1	1	1	289	289	SMEAN(HE3)
10.	PWE 4_1	5	1	289	289	SMEAN(HE4)
11.	PWE 5_1	2	1	289	289	SMEAN(HE5)
12.	PWE 6_1	1	1	289	289	SMEAN(HE6)
13.	PWE 7_1	2	1	289	289	SMEAN(HE7)
14.	PWE 8_1	2	1	289	289	SMEAN(HE8)
15.	PWE 10_1	2	1	289	289	SMEAN(HE10)
16.	PMCS2_1	1	1	289	289	SMEAN(PMCS2)
17.	PMCS6_1	1	1	289	289	SMEAN(PMCS6)
18.	PMCS7_1	1	1	289	289	SMEAN(PMCS7)
19.	PMCS9_1	2	1	289	289	SMEAN(PMCS9)
20.	SP2_1	1	1	289	289	SMEAN(SP2)
21.	SP3_1	2	1	289	289	SMEAN(SP3)
22.	SP_1	4	1	289	289	SMEAN(SP4)
23.	SP5_1	3	1	289	289	SMEAN(SP5)
24.	SP6_1	4	1	289	289	SMEAN(SP6)
25.	SP9_1	1	1	289	289	SMEAN(SP9)

APPENDIX VI: REMOVAL OUTLIER (MAHALANOBIS)

Case	MAH_1	Case	MAH_1	Case	MAH_1	Case	MAH_1
1	4.59536	26	1.70108	51	3.55796	76	3.31337
2	1.79401	27	6.37115	52	5.37484	77	2.08112
3	5.91459	28	.76945	53	6.56082	78	3.34028
4	1.69186	29	3.28244	54	1.24970	79	3.59241
5	4.79348	30	4.74387	55	2.91088	80	.76808
6	5.03993	31	2.27331	56	5.65296	81	.67835
7	2.58936	32	4.22227	57	6.12365	82	.54673
8	2.58936	33	3.38158	58	5.24294	83	21.79197
9	2.88095	34	4.67183	59	9.05713	84	8.00785
10	.80352	35	2.39144	60	.56678	85	4.19239
11	1.54850	36	2.70000	61	1.05167	86	.97406
12	2.44079	37	2.16354	62	1.12704	87	.80352
13	2.87961	38	4.60819	63	.96857	88	.11428
14	2.72051	39	.80352	64	10.58251	89	.74387
15	5.10915	40	7.83544	65	1.61442	90	3.77095
16	.45942	41	5.79029	66	4.30356	91	3.75447
17	8.62920	42	5.65296	67	.55713	92	1.54615
18	6.72398	43	9.52663	68	1.05610	93	1.93008
19	2.31815	44	5.65296	69	1.60584	94	2.38568
20	.40932	45	9.22738	70	2.91088	95	8.23596
21	3.76935	46	1.49872	71	3.10135	96	1.03619
22	2.38264	47	4.15715	72	3.72661	97	4.67815
23	4.26708	48	11.89053	73	2.73036	98	3.15009
24	10.98607	49	13.38441	74	2.33153	99	4.82287
25	1.35122	50	10.49573	75	1.20791	100	.80352

APPENDIX VI (CONTINUED)

Case	MAH_1	Case	MAH_1	Case	MAH_1	Case	MAH_1
101	3.49779	126	1.93279	151	7.09966	176	9.36880
102	2.61419	127	4.33030	152	6.31763	177	5.30510
103	11.33068	128	3.45431	153	.86990	178	7.49919
104	5.09907	129	22.43833	154	.78620	179	1.94817
105	7.31798	130	2.71333	155	3.94750	180	4.74377
106	.20481	131	1.91825	156	14.28732	181	4.64390
107	1.58234	132	1.41163	157	1.77559	182	.83131
108	2.04229	133	.84888	158	.60397	183	.29356
109	3.48268	134	2.70376	159	4.55458	184	.61154
110	6.34343	135	3.58796	160	9.51909	185	5.52709
111	3.20083	136	2.07591	161	5.65296	186	2.46944
112	.80352	137	2.24464	162	5.65296	187	1.21927
113	1.74048	138	2.28992	163	4.94441	188	1.20537
114	1.95187	139	.90082	164	20.00063	189	3.50664
115	2.72082	140	2.22462	165	13.07765	190	3.27800
116	.57106	141	.42968	166	1.71106	191	4.40585
117	3.48901	142	2.06941	167	4.44955	192	1.65641
118	.63301	143	2.34938	168	5.14422	193	1.99635
119	6.63778	144	3.47623	169	4.82234	194	2.49249
120	1.92370	145	1.09669	170	4.12652	195	1.64518
121	4.81663	146	.87704	171	15.31416	196	1.21844
122	4.05817	147	11.01987	172	1.66838	197	1.07917
123	6.28466	148	12.10827	173	.89816	198	2.28533
124	1.83426	149	11.54780	174	4.57249	199	1.50686
125	1.85706	150	3.09304	175	4.71977	200	1.96910

APPENDIX VI (CONTINUED)

Case	MAH_1	Case	MAH_1	Case	MAH_1	Case	MAH_1
201	17.52966	226	3.52954	251	14.33996	276	2.72191
202	.49046	227	5.46881	252	3.61261	277	7.16559
203	11.14441	228	12.12037	253	4.05817	278	10.00814
204	3.31637	229	3.76805	254	3.29093	279	6.68433
205	4.39009	230	5.56500	255	6.00839	280	1.63659
206	.52384	231	2.36334	256	4.98657	281	1.02348
207	4.75585	232	1.85104	257	3.60133	282	1.90602
208	1.51653	233	1.25879	258	3.60133	283	.87521
209	2.10403	234	14.82861	259	2.81314	284	2.59482
210	1.50772	235	3.60651	260	2.49261	285	3.73466
211	1.42120	236	.43337	261	4.94256	286	2.72205
212	1.25873	237	2.01785	262	.18565	287	2.79344
213	.25123	238	2.20404	263	2.79155	288	2.05266
214	1.85626	239	2.80057	264	1.79688	289	2.37903
215	1.51079	240	.79408	265	4.49198		
216	9.00836	241	.66403	266	1.70974		
217	.70376	242	3.29102	267	1.02225		
218	.99184	243	2.01857	268	2.81314		
219	3.89114	244	8.08089	269	3.60133		
220	1.44717	245	1.66507	270	24.76142		
221	5.46267	246	.89676	271	4.43197		
222	3.83789	247	1.84930	272	2.48621		
223	3.86775	248	1.28150	273	4.31350		
224	3.43758	249	.43491	274	3.42465		
225	7.87110	250	2.53489	275	14.17795		

APPENDIX VII: DESCRIPTIVE STATISTICS

	N	Mini	Max	Mean	Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
PE1	285	1.0	5.0	4.046	.8358	-1.361	.144	3.050	.288
PE2	285	2.0	5.0	4.120	.7504	-.704	.144	.488	.288
PE3	285	1.0	5.0	4.232	.7616	-1.092	.144	1.973	.288
PE4	285	1.0	5.0	4.371	.6870	-1.232	.144	2.716	.288
PE5	285	2.0	5.0	4.303	.7070	-.931	.144	1.055	.288
PE6	285	2.0	5.0	4.347	.6782	-.899	.144	.983	.288
PE7	285	1.0	5.0	4.137	.8551	-1.049	.144	1.265	.288
PE8	285	1.0	5.0	4.102	.8266	-1.022	.144	1.308	.288
PE9	285	1.0	5.0	3.933	.9415	-.810	.144	.444	.288
PE10	285	1.0	5.0	4.102	.7962	-.901	.144	1.012	.288
PE12	285	1.0	5.0	4.028	.8512	-.882	.144	.957	.288
REN1	285	1.0	5.0	3.825	.9368	-.834	.144	.349	.288
REN2	285	1.0	5.0	3.880	.8719	-.790	.144	.467	.288
REN3	285	1.0	5.0	3.874	.9668	-.898	.144	.512	.288
REN4	285	1.0	5.0	3.701	1.0270	-.610	.144	-.166	.288
REN5	285	1.0	5.0	3.712	.9794	-.665	.144	.080	.288
REN6	285	1.0	5.0	3.839	1.0457	-.696	.144	-.168	.288
PWE1	285	1.0	5.0	2.846	1.2771	.037	.144	-1.219	.288
PWE2	285	1.0	5.0	3.319	1.0480	-.502	.144	-.577	.288
PWE3	285	1.0	5.0	3.349	1.0949	-.484	.144	-.629	.288
PWE4	285	1.0	5.0	3.327	1.1687	-.371	.144	-.765	.288
PWE5	285	1.0	5.0	3.417	1.1700	-.449	.144	-.702	.288
PWE6	285	1.0	5.0	3.211	1.1858	-.134	.144	-1.027	.288
PWE7	285	1.0	5.0	3.265	1.2264	-.334	.144	-.981	.288
PWE8	285	1.0	5.0	3.339	1.0900	-.412	.144	-.644	.288
PWE9	285	1.0	5.0	3.639	1.1129	-.700	.144	-.268	.288
PWE10	285	1.0	5.0	3.548	1.1007	-.609	.144	-.392	.288
PWE11	285	1.0	5.0	3.312	1.2771	-.490	.144	-.906	.288
PWE12	285	1.0	5.0	3.418	1.1798	-.481	.144	-.762	.288
PMCS1	285	1.0	5.0	3.270	1.0880	-.339	.144	-.770	.288
PMCS2	285	1.0	5.0	3.370	1.0451	-.433	.144	-.513	.288
PMCS3	285	1.0	5.0	3.386	1.0474	-.324	.144	-.655	.288
PMCS4	285	1.0	5.0	3.621	1.0262	-.507	.144	-.314	.288
PMCS5	285	1.0	5.0	3.344	1.0752	-.360	.144	-.581	.288
PMCS6	285	1.0	5.0	3.553	.8885	-.267	.144	-.250	.288
PMCS7	285	1.0	5.0	3.623	1.0560	-.752	.144	.141	.288
PMCS8	285	1.0	5.0	3.277	1.0500	-.243	.144	-.650	.288
PMCS9	285	1.0	5.0	3.473	1.1817	-.471	.144	-.701	.288
SP1	285	1.0	5.0	2.702	1.1713	.254	.144	-1.003	.288
SP2	285	1.0	5.0	3.718	.9028	-.800	.144	.492	.288
SP3	285	1.0	5.0	3.830	.8996	-.768	.144	.499	.288
SP4	285	1.0	5.0	4.028	.8174	-1.144	.144	2.131	.288
SP5	285	1.0	5.0	4.000	.8517	-.999	.144	1.247	.288
SP6	285	1.0	5.0	4.053	.8354	-1.050	.144	1.519	.288

	N	Mini	Max	Mean	Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SP7	285	1.0	5.0	4.011	.8660	-.905	.144	.907	.288
SP8	285	1.0	5.0	3.965	.8384	-.836	.144	.978	.288
SP9	285	1.0	5.0	3.986	.8474	-.812	.144	.845	.288
SP10	285	1.0	5.0	3.881	.8920	-1.083	.144	1.532	.288
SP11	285	1.0	5.0	3.849	.8970	-.848	.144	.787	.288
SP12	285	1.0	5.0	3.958	.8038	-.866	.144	1.350	.288
SP13	285	1.0	5.0	3.768	.8935	-.721	.144	.410	.288
SP14	285	1.0	5.0	3.793	.9169	-.737	.144	.552	.288
SP15	285	1.0	5.0	3.818	.9317	-.944	.144	.869	.288
SP16	285	1.0	5.0	4.105	.8818	-1.231	.144	1.878	.288



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APPENDIX VIII: SECOND ORDER DISCRIMINANT VALIDITY

	PEM	PEC	PES	PEI
PEM	0.884			
PEC	0.612	0.885		
PES	0.438	0.528	0.865	
PEI	0.547	0.578	0.662	0.882

APPENDIX IX: SECOND ORDER CROSS LOADING

	MT	PEM	PEC	PES	PEI
PEM1_1	1.852	0.839	0.460	0.356	0.459
PEM2_1	2.834	0.918	0.543	0.403	0.509
PEM3_1	2.433	0.894	0.612	0.400	0.482
PEC4_1	2.648	0.536	0.910	0.471	0.516
PEC5_1	2.250	0.535	0.882	0.482	0.510
PEC6_1	1.983	0.554	0.863	0.450	0.508
PES7_1	1.816	0.426	0.501	0.857	0.531
PES8_1	2.043	0.353	0.494	0.878	0.582
PES9_1	1.927	0.355	0.372	0.860	0.606
PEI10_1	1.855	0.479	0.562	0.563	0.855
PEI11_1	2.527	0.462	0.489	0.611	0.902
PEI12_1	2.352	0.507	0.476	0.576	0.888

MT: Multicollinearity Test

APPENDIX X: KREJCIE AND MORGAN'S SAMPLE SIZE TABLE

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.

S is sample size.